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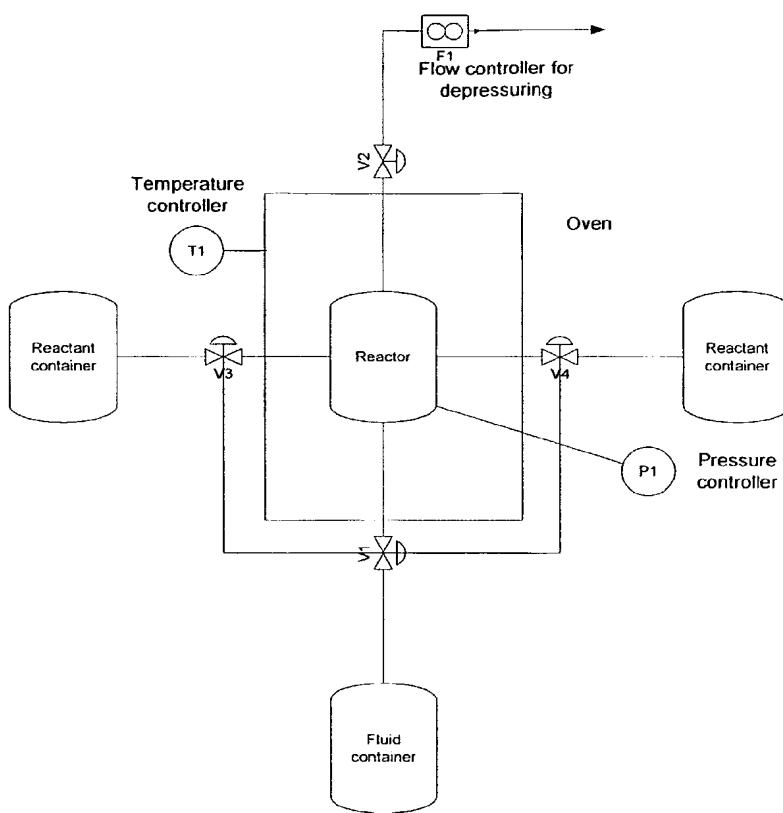
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(54) Title: METHOD AND APPARATUS FOR PRODUCTION OF A COMPOUND HAVING SUBMICRON PARTICLE SIZE AND A COMPOUND PRODUCED BY THE METHOD



(57) Abstract: The invention relates to an improved method of manufacturing a compound having a sub-micron primary particle size such as a metal compound such as metal oxides, metaloxy hydroxides metal hydroxides, metal carbides, metal nitrides, metal carbonitrides, metal borides, electroceramics and other such compound, said method comprising the steps of: introducing a solid reactor filling material in a reactor, introducing a metal-containing precursor, a semi-metal-containing precursor, a metal-containing oxide or a semi-metal-containing oxide in said reactor, introducing a reactant or a substitution source into the said reactor, and introducing a supercritical solvent into the said reactor. These steps result in the formation of said compound in the proximity of the said solid reactor filling material.



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